Regulatory Impact Statement

Reform of the Telecommunications Service Obligation Framework and Industry Levy Arrangements

Agency Disclosure Statement

This Regulatory Impact Statement has been prepared by *the Ministry of Economic Development*.

It provides an analysis of options to *reform the telecommunications service obligation (**TSO**) framework and the levy funding arrangements for the telecommunications sector*.

A review of the TSO Framework and industry levy funding arrangements was conducted by officials in 2009. The review resulted in the development of a Proposal for Comment entitled "TSO Reform and Funding Telecommunications Development" (the **Proposal**). 23 submissions were received on the Proposal from a range of interested parties, the majority of which voiced support for the policy proposals therein. The analysis and selection of policy options was conducted in light of a number of germane factors, including:

- the Government's rural telecommunications policies and associated electoral commitments; and
- the constraints inherent in the nature of TSO instruments which, as agreements between the Crown and third-party service providers, may only be amended through negotiation and mutual agreement.

It is the opinion of the Ministry that the final policy recommendations presented in the Cabinet paper accompanying this Regulatory Impact Statement (**RIS**) are unlikely to impair private property rights, market competition, or the incentives on businesses to innovate and invest, or override fundamental common law principles (as referenced in Chapter 3 of the Legislation Advisory Committee Guidelines). We do acknowledge however that implementation of the policy recommendations of the Cabinet paper may alter the distribution of some future economic rents within the telecommunications sector and consequently may have some impact on property and share values.

The proposals do impose some costs on businesses through the imposition of a new industry levy; however these costs are expected to be offset by the removal of other levy obligations. Additionally it is important to note that (a) the funds collected under the new levy are intended to be recycled back to the industry via a competitive grants process; and (b) that the proposals are likely to result in a significant reduction in compliance and administrative costs. Consequently, the Ministry views the proposals as consistent with Government commitments on regulatory reform.

[……………………………………………………………………………………………]

Signed: […………………………..] Date:

STATUS QUO AND PROBLEM DEFINITION

Context

Rural Telecommunications Policies

1 Advanced telecommunications services, and in particular fast broadband services, are widely recognised as a key enabler of economic growth and the development of a knowledge-based economy. Given New Zealand's relative dependence on its rural sectors for economic growth and productivity improvements, the benefits to New Zealand of improving rural telecommunications could be significant. Improved telecommunications services could also provide rural communities with significant flow-on social, educational and health benefits.

2 The Government has proposed a number of rural telecommunications policy initiatives including:

a investing directly in rural communities to provide fast broadband to rural users through a Rural Broadband Initiative (the **RBI**);

b improving the effectiveness of the local residential telephone service Telecommunications Service Obligations (**Local Service TSO**); and

c better targeting of industry funding through a Telecommunications Development Levy (the **TDL**).

3 To progress the latter two initiatives the Government approved a review of the TSO Framework with the following objectives:

a the TSO review shall investigate TSO arrangements to ensure that they are efficiently and effectively focused on long term benefits to end users; and

b this review shall also consider the TSO provisions (Part 3) of the Telecommunications Act 2001 and the Local Service TSO established under those provisions.

The Status Quo

Rural Telecommunications Policy

4 The Government has proposed a number of significant initiatives in telecommunications policy. These initiatives will drive improvements in New Zealand's global competitiveness.

5 The Government's ultra-fast broadband investment initiative aims to accelerate the roll-out of ultra-fast broadband to 75% of New Zealanders. This is to be complemented by a Rural Broadband Initiative (as proposed in the accompanying paper "Rural Broadband Initiative: Final Policy Proposal") which seeks to address key constraints in, and promote the provision of, high speed broadband services in rural areas.

6 Poor commercial incentives (driven by low population density) have resulted in a long history of low investment in New Zealand's rural telecommunications network, and mechanisms introduced to address this issue (e.g. the Telecommunications Service Obligations) have not been effective.

The TSO Framework

7 TSO instruments are agreements between the Crown and telecommunications service providers for the supply of services which would not otherwise be available to users at an affordable price. Currently there are two such instruments:

a the Local Residential Telephone Service TSO Deed between the Crown and Telecom; and

b the Telecommunications Relay Service TSO Deed between the Crown and Sprint International (the **Deaf Relay TSO**).

The Local Service TSO Deed

8 When Telecom was privatised in 1990, the Kiwi Share Obligations (**KSO**) placed a number of requirements on Telecom in respect of local telephone service. In December 2001 these requirements were superseded, in an enhanced form, and became the TSO for local residential telephone service[1].

9 The Local Service TSO is primarily a consumer protection mechanism that ensures the availability and affordability of basic telecommunication services in New Zealand. The Local Service TSO ensures that "residential local telephone service"[2]:

- is available to residential customers throughout New Zealand; and
- is available in rural areas at a price and quality comparable to the local service available in urban areas.

10 The TSO Deed further requires Telecom to:

- offer residential customers the option of toll free local calling;
- limit price rises in the standard residential line rental to no more than the rate of inflation (as measured by the Consumer Price Index - **CPI**); and
- enable residential customers to make emergency 111 calls.

11 Telecom currently receives compensation for fulfilling the Local Service TSO requirements through a combination of:

a the revenue it receives from local service customers, which is fixed by the CPI-indexed cap on the standard line rental; and

[1] Note: the KSO obligations remain intact and return to force in the event that the TSO Deed is revoked.
[2] A defined service in the TSO Deed.

b the TSO charge Telecom receives from the industry, which is determined by the Commerce Commission's (the **Commission**) modelling of the net costs for supplying local service to commercially non-viable customers.

12 The former of these compensation mechanisms was included within the TSO Deed itself. It is important to note that, as the Local Service TSO Deed is an agreement rather than a legislative instrument, amendments to the requirements contained within the Deed need to be negotiated and agreed between the Crown and Telecom.

13 The latter compensation mechanism arose through an exchange of letters between the Crown and Telecom in December 2000. These letters indicated, on the part of the Crown, its intention to upgrade the Kiwi Share and that the Crown and Telecom jointly investigate how this upgrade will be implemented.

14 In its letter of 20 December 2000, the Crown stated that:

> "Outside of the Kiwi Share itself we intend to establish a transparent funding mechanism for sharing of any KSO loses by other telecommunications companies. The methodology for calculating KSO loses will be similar to that used in the current Telecommunications (Information Disclosure) Regulation of 1999, but will be set in accord with appropriate principles.
>
> The level of each industry member's contribution will be determined by the Telecommunications Commissioner in accordance with an appropriate methodology, based on a share of relevant telecommunications revenue streams including mobile, long distance, data and local access. Approved shares will be recoverable by Telecom as a debt due from other companies. We would expect the relevant proportions to be recalibrated at least annually to reflect changes in shares of the relevant revenue streams."

15 The policy intent was for KSO (subsequently TSO) losses to be shared across the industry through the establishment of a transparent funding mechanism. That intention manifested itself in the TSO Determination process in the Telecommunications Act 2001.

16 It is important to note that neither the exchange of letters nor the TSO Deed suggested that the funding mechanism would be immutable and not subject to later legislative amendment. Had this been the Crown's intent, the funding mechanism would have been specified in the Deed itself rather than in legislation. It is understood that Telecom proposed this approach in 2000, but the Crown specifically refused to be contractually bound in this manner.

CPI-Indexed Line Rental

17 As the provider of the national Local Service TSO, Telecom gains benefit under the Deed through its ability to raise the standard residential line rental in line with the rate of increase in the CPI.

18 Telecom has, for most of its residential customers, exercised its ability to increase the monthly line rental. In some areas where competition exists, such as Auckland, Wellington and Christchurch, Telecom has a lower line rental.

19 Since 2001 the standard residential line rental has increased by $8.90 from $32.30 per month to $41.20 per month. This represents a 21.6 percent nominal increase. Based on 1,210,448 residential lines as at December 2001, this represents revenue to Telecom of approximately $10.8 million per month going forward.

20 Conversely, had the standard residential line rental been indexed to the telecommunications sector Producer Price Index (**PPI**)[3] over the same period, Telecom would have been limited to an increase of $5.51, from $32.30 per month to $37.81. This would represent a 17.1% nominal increase. Based on 1,210,448 residential lines as at December 2001, this would represent revenue to Telecom of approximately $6.7 million per month going forward.

Telecommunications Act 2001 TSO Charge Methodology

21 Part 3 of the Telecommunications Act 2001 provides a framework for the sharing of TSO-related costs across industry participants. Under this framework, the Commission is required to calculate the net losses incurred by the provider in meeting its TSO commitments. This net cost (also known as a **TSO Charge**) is then apportioned amongst telecommunications providers on a market share basis.

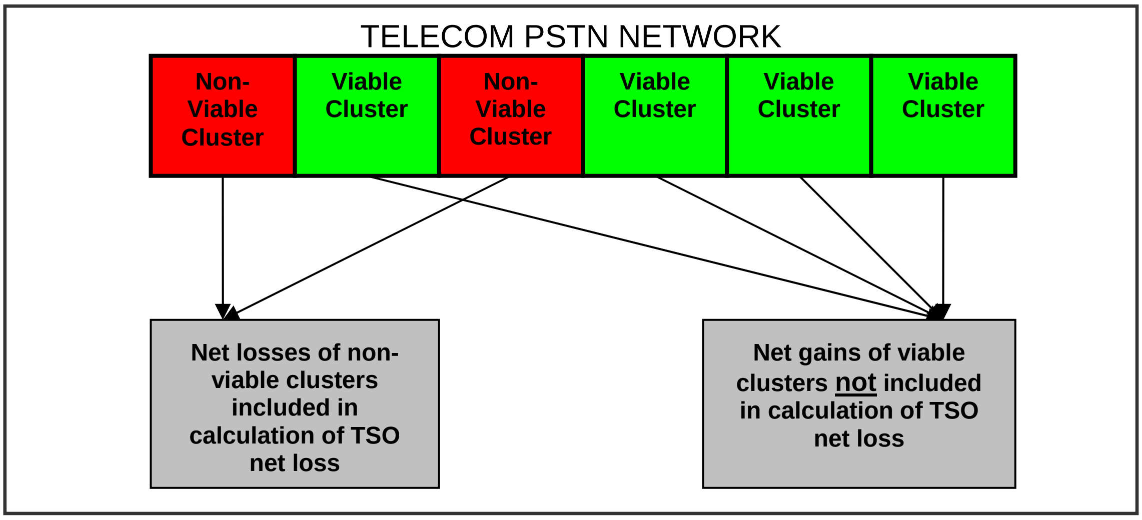
22 The Commission has determined that there are approximately 1953 clusters of customers which are commercially non-viable and accrue a net cost to Telecom. This amounts to approximately 58,000 telephone access lines classified as commercially non-viable, which constitutes approximately five percent of Telecom's total residential telephone access network.

23 In applying the current methodology, a net cost amount is calculated for a customer cluster as a whole if the expenditure in servicing that cluster is greater than the revenue received from that cluster. The cluster is then classified as commercially non-viable.

24 The total TSO net cost is then calculated by summing the net costs calculated for each commercially non-viable customer cluster. The net profits accrued from clusters of customers that are not commercially non-viable (i.e. the ~95% of Telecom’s telephone access network that is profitable) are not included within this calculation of the TSO charge.

[3] The telecommunications sector PPI is a general measure of the change in price levels for inputs used by the telecommunications sector.

Figure: The Current Local Service TSO Charge Methodology



25 Following calculation of the Local TSO charge, the Commission is required under the Act to determine the proportion of the charge payable by the liable industry participants. This is determined by the relative revenues each liable industry participant has earned through connection to Telecom's public switched telephone network (**PSTN**). In the past the Commission has allocated approximately 67% of the Local TSO charge to Telecom, with the remaining 33% allocated across other industry participants.

Problem Definition and Analysis

26 Officials' review of the current TSO framework and levy arrangements identified that—

a the Local Service TSO obligations and objectives remain appropriate and relevant; but

b the current system of cross-subsidisation within the telecommunications sector is deficient in a number of key respects. In particular it was identified that:

i Telecom is likely overcompensated for the provision of the Local Service TSO;

ii the TSO framework is administratively challenging and has resulted in significant compliance costs; and

iii the expenditure of Local Service TSO charges has been neither transparent nor accountable.

27 The review also developed and analysed a number of options for consolidating and improving the funding of cross-subsidies in the telecommunications industry, most notably for the following purposes:

a the Government's Rural Broadband Initiative;

b TSO charges arising from the TSO Framework in the Telecommunications Act 2001; and

c emergency call system upgrades.

Local Service TSO Objectives and Requirements

28 The Local Service TSO ensures that “residential local telephone service”[4]:

- is available to rural communities throughout New Zealand;
- is available in rural areas at a price and quality comparable to local service available in urban areas;
- offers households the option of toll free local calling;
- limits price rises to no more than the rate of inflation; and
- enables households to make emergency 111 calls.

29 Officials’ review of the Local Service TSO regime identified that these obligations remain relevant and appropriate in a New Zealand context. Officials did not consider it feasible or useful to undertake substantial quantitative analysis of the value of the Local Service TSO because ultimately the TSO is an instrument of social policy and provides social rather than economic benefits (e.g. the ability for New Zealander’s to contact emergency services in times of need, social inclusion etc). Quantification of these benefits would therefore be substantially arbitrary.

30 That said, the universal availability and affordability of basic telephone services is internationally recognised as an important social policy objective. This is supported by the fact that nearly all developed countries impose some form of universal service requirement on the telecommunications industry.

31 The imperative to have a universal service arrangement for basic telephones in New Zealand has been confirmed by Parliament and has not been altered through successive governments.

32 Officials’ review of the Local Service TSO identified little prima facie evidence to support removal of, or substantive amendments to, the current Local Service TSO obligations and objectives. This stance was generally supported by submitters to the TSO reforms proposal for comment; both telecommunications end-user representatives and industry participants recognised the importance and value of these consumer protections.

33 Furthermore, officials noted that the Local Service TSO requirements are stipulated within the Local Service TSO Deed and consequently amendment of these requirements would need to be negotiated and agreed with Telecom.

34 Officials did identify a need to further investigate whether the service specifications in the Local Service TSO Deed should be amended to enhance technology neutrality. This is an ongoing policy process which may potentially lead to later negotiations with Telecom on the Local Service TSO Deed.

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[4] A defined service in the TSO Deed.

Compensation of Telecom for Local Service TSO Provision

35 The Local Service TSO is a nationwide agreement across Telecom's residential customers. Although Telecom has taken on a number of obligations in the TSO Deed, the agreement also provides a number of benefits to Telecom. Most notably Telecom is able to increase monthly line rental by the CPI and has done so for most of the country because it has not faced direct facilities-based competition in the access network outside of the main population centres.

36 Most evidence suggests the additional revenues that Telecom has accrued through line rental price increases outweigh the costs of TSO service provision. Officials would note that there are substantial constraints to any analysis of this issue. In particular we note that—

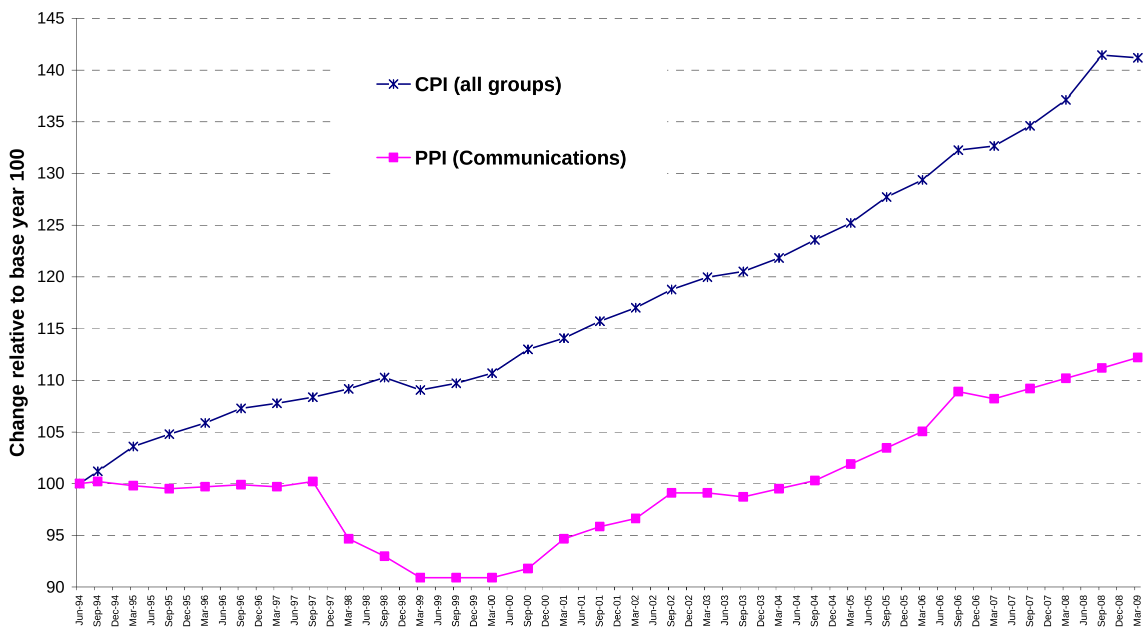
a Telecom’s PSTN-related costs are not publicly available information;

b Officials do not have any information disclosure powers to compel release of this information; and

c Even supposing this information was available modelling the actual costs of Telecom’s PSTN would be a substantial undertaking for which we do not have the requisite resources.

37 As a consequence of these limitations, officials have used suitable proxies to inform policy recommendations. In particular analysis of the relative paths of the Consumer Price Index vis-à-vis the telecommunications sector Producer Price Index (PPI) – the most suitable proxy for telecommunications input costs – between June 1994 and March 2009, suggests that Telecom has realised a significant surplus through raising line rentals at the rate of CPI.

Relative change CPI and PPI (Communications)



38 In addition to the surpluses Telecom has received through the CPI-indexation of the standard residential line rental, Telecom has received compensation for the costs of Local Service TSO provision through the TSO cost determination process specified in the Act and administered by the Commission. Through its modelling process, the Commission assesses the Local Service TSO charge at around $70 million per annum. Approximately $23 million of this charge has been borne by Telecom's competitors through the allocation of this charge on a market share basis.

39 As noted earlier in this paper, the Commission's determination of the net cost of Local Service TSO provision includes only the costs and benefits accrued in servicing commercially non-viable customer clusters (~5%) of Telecom's residential network. The additional revenue Telecom receives through the CPI-indexation of the standard line rental is therefore largely not taken into account.

Administrative Burden and Compliance Costs under the TSO Framework

40 The current TSO Framework has resulted in significant compliance costs and administrative burden.

41 The Commission's costs associated with conducting the TSO charge determination process are estimated at approximately $600,000 per annum. These costs are charged back to the industry through the levy funding of the Telecommunications Commissioner.

42 Whilst the industry's compliance costs associated with the process are not currently known, they are likely to be substantial. These include costs incurred through development of process inputs and alternative cost models.

43 The TSO cost determination process conducted by the Commission has also been subject to legal challenges by both Telecom and Vodafone. The protracted arguments over the cost modelling process have contributed to delays in the finalisation of TSO determinations by the Commission, which has consequently not completed a Local Service TSO cost determination for 2006/7 and all subsequent years. The parties to these proceedings have likely incurred significant legal costs through these challenges.

Transparency and Accountability

44 Another key concern is the lack of transparency regarding the location of uneconomic customers and the actual cost to Telecom of servicing these customers. The lack of transparency in this area has been heavily criticised by other industry participants.

45 While Telecom has received considerable subsidy from the industry for Local Service TSO costs, there has been no obligation on Telecom to:

a publicly disclose what money it actually spends on commercially non-viable customer clusters relative to the TSO compensation it receives; and

b publicly disclose where commercially non-viable customer clusters are located so that other potential providers could offer lower cost solutions.

Funding of Cross-subsidies within the Telecommunications Sector

46 Irrespective of any reforms to the TSO Framework, in the absence of adequate commercial incentives for telecommunications infrastructure investment in some areas of rural New Zealand, it is likely that some subsidisation of infrastructure development will continue to be necessary.

47 Three areas where such cross-subsidisation was likely to continue to be required were identified:

a to provide funding for the Government's Rural Broadband Initiative;

b to address TSO charges arising from the TSO Framework in the Telecommunications Act 2001; and

c to facilitate upgrades in the emergency call system.

OBJECTIVES

48 The Government has proposed a number of rural telecommunications policy initiatives including:

a investing directly in rural communities to provide fast broadband to rural users through a Rural Broadband Initiative;

b improving the effectiveness of the local residential telephone service Telecommunications Service Obligations; and

c better targeting of industry funding through a Telecommunications Development Levy.

49 To progress the latter two initiatives the Government approved a review of the TSO Framework with the following objectives:

a the TSO review shall investigate TSO arrangements to ensure that they are efficiently and effectively focused on long term benefits to end users; and

b this review shall also consider the TSO provisions (Part 3) of the Telecommunications Act 2001 and the Local Service TSO established under those provisions.

50 The Government's objectives for reform of the Local Service TSO, as set out in the TSO Reform proposal for comment, are to:

- ensure funds collected through legislative mechanisms for rural telecommunications are spent effectively;
- improve the transparency and predictability of TSO compensation arrangements;
- minimise compliance requirements for telecommunications service providers; and

- ensure consistency with the relevant World Trade Organisation commitments for telecommunications services.

51 The Government has also stated that the Telecommunications Development Levy would be designed with the following principles in mind:

- economic efficiency;
- technology independence;
- competitive independence; and
- enforceability, simplicity, transparency and certainty.

REGULATORY IMPACT ANALYSIS

52 The problem analysis section of this RIS identified the primary issue to be addressed as the existence of inefficiencies and misallocations in the system of cross-subsidisation within the telecommunications sector.

53 In seeking policy options to address this issue, officials undertook a two-stage process:

a identifying and analysing options to address historical inefficiencies and misallocations within the system of cross-subsidisation within the sector (the TSO framework); then

b identifying and analysing options for raising and allocating funding for these subsidies going forward.

Addressing Historical Inefficiencies and Misallocations within the TSO Framework

54 The TSO framework comprises two separate TSO instruments and a statutory framework within the Telecommunications Act. The two TSO instruments are:

a the Local Residential Telephone Service TSO Deed **(Local Service TSO**); and

b the Telecommunications Relay Service TSO Deed (**Deaf Relay TSO**).

55 Due to its comparatively small size and the fact that it has a specified rather than calculated charge associated with it, the Deaf Relay TSO was largely excluded from the review conducted. Rather it has been reviewed as a separate work-stream.

56 Consequently officials' primary focus was the Local Service TSO which is currently provided by Telecom. In respect of this TSO three primary issues were identified:

a Telecom is likely overcompensated for the provision of the Local Service TSO (**problem 1**);

b the TSO framework is administratively challenging and has resulted in significant compliance costs (**problem 2**); and c the expenditure of Local Service TSO charges has been neither transparent nor accountable (**problem 3**).

57 Officials identified and considered a number of options to address these issues:

a remove or substantively amend the Local Service TSO obligations and requirements (**option 1**);

b amend the CPI-indexed price cap on the Local Service TSO to reduce the compensation received by Telecom (**option 2**);

c amend the TSO framework within the Telecommunications Act 2001 to address the identified problems in a targeted manner (**option 3**); and

d maintain the status quo (**option 4**)

58 In considering which of these options to pursue, officials considered:

a the objectives of the Government for TSO reform and rural telecommunications more generally;

b the extent to which each policy option would address the identified problems; and

c the practicalities of implementing each policy option.

<u>Option 1: remove or substantively amend the Local Service TSO obligations and requirements</u>

59 The first option considered was the revocation or substantial amendment of the Local Service TSO obligations and requirements. This option would potentially address all three problems identified above.

60 However, officials considered that this option was not feasible because the Local Service TSO obligations and requirements remained relevant and desirable in their role as a consumer protection mechanism, ensuring the availability and affordability of basic telecommunications services across New Zealand. Officials consider that this view is consistent with the political consensus that universal basic telephone service is an essential social policy. Subsequent public consultation on the continued relevance of the Local Service TSO objectives identified broad agreement with this position.

61 Furthermore the Local Service TSO obligations and requirements are contained within the Local Service TSO Deed which is a negotiated agreement between the Crown and Telecom. There is no provision within the agreement for the Crown to unilaterally withdraw or amend the Deed absent a material breach by Telecom.

62 Given that there is a low likelihood that the Government would be amendable to concessions on the obligations imposed on Telecom by the TSO Deed, officials consider it equally unlikely that Telecom would concede to a reduction in the benefits its receives under the Deed sufficient to remove the windfall gains that Telecom accrues. As such option 1 was considered to be impractical as well as undesirable in light of the Government’s objectives for telecommunications policy.

Option 2: amend the CPI-indexed price cap on the Local Service TSO to reduce the compensation received by Telecom

63 The second option considered was to amend the CPI-indexed price cap on the TSO local service in order to reduce the compensation received by Telecom for TSO service provision. This option could, if implemented successfully, address the first problem identified above; that is, the overcompensation of Telecom in respect of the Local Service TSO.

64 However, officials considered that this option would fail to address the second and third problems identified above. By leaving the TSO charge determination and allocation mechanisms within the Act as the primary means of funding the Local Service TSO costs, this option would retain a highly complex, expensive and continually litigated process. Absent additional Government actions the third problem (transparency and accountability) would also go unaddressed.

65 Officials also considered that this option, like the first option, was impractical due to the CPI-indexed price cap being a term of the TSO Deed itself. Amendment of the price cap would require Telecom's agreement and it is likely that Telecom would require substantial dispensations in order to agree to such an amendment. For the reasons noted under option 1, officials consider it highly unlikely that the Government would consider major dispensations regarding the obligations of the TSO Deed. As such, it was considered highly unlikely that the Crown and Telecom would be able to reach a negotiated agreement that resulted in a lowering of this price-cap sufficient to address the issue of overcompensation.

Option 3: amend the TSO framework within the Telecommunications Act 2001 to address the identified problems in a targeted manner

66 The third option considered by officials was to amend the TSO framework within the Telecommunications Act 2001 to address the identified problems in a targeted manner. This approach was considered by officials to address all three problems identified above.

67 In particular it was identified that this secondary mechanism for compensating Telecom for the provision of the Local Service TSO did not adequately take into account the compensation Telecom received from the primary mechanism; that is the cross-subsidisation between profitable and commercially non-viable customers made possible through the surpluses attained under the CPI-indexed price cap on standard residential line rental charges.

68 It was further identified that that this oversight might be resolved by amending the Act to ensure that the Commission considered the costs and benefits to Telecom of providing the Local Service TSO on a national basis, rather than solely in respect of those customer clusters that made an aggregate loss. As the TSO charge determination and allocation framework is not mentioned within the Local Service TSO Deed, but is rather a statutory process contained within the Telecommunications Act 2001, officials considered such a change as both practical to implement and entirely within the unilateral remit of the Government.

69 One consequence of this proposed change was that Telecom would be unlikely, in the foreseeable future, to suffer a loss on its provision of the Local Service TSO if the benefits and costs were considered on a national basis. Given this likelihood, officials considered that the second problem identified above (high administrative burden and compliance costs) could largely be addressed by providing for a dynamic TSO charge determination process whereby a determination would only be prepared by the Commission upon the request of the TSO service provider (who would only be incentivised to make such a request if they considered they could prove a loss).

70 Finally, if one presumes a zero TSO charge for the Local Service TSO, the issue of transparency and accountability of subsidies becomes a lower order matter. Officials (and the industry's) primary concern is that, where subsidies are provided between competing service providers, the subsidising provider should have surety regarding the expenditure of those funds. As a zero TSO Charge would imply no cross-subsidisation across service providers this third issue is largely addressed. That said officials considered it prudent to ensure transparency under alternative scenarios and consequently recommended that, in the event of a positive TSO charge being determined for local service, the TSO framework under the Act should require Telecom to disclose the location of commercially non-viable customers and to account for the expenditure of funds sourced from other service providers.

71 In conclusion officials considered option 3 to be the primary counterfactual to the status quo.

<u>Option 4: Maintain the Status Quo</u>

72 The final option considered was to maintain the status quo with regards to the Local Service TSO. This option formed the factual in our analysis. The primary downsides of the factual were considered to be:

a all three problems identified above would continue; and

b the factual was therefore inconsistent with the objectives of the Government.

Quantitative Comparison: Factual vs. Counterfactual

73 In considering the relative merits of the factual (status quo) and the counterfactual (the proposal), officials identified the relevant quantitative impacts of the two options. The results of this analysis are presented in the following table.

Item	**Factual**	**Counterfactual**	**Change**
Expected LS TSO Charge paid by Others to Telecom	~$23 million	$0	~($23 million)
Administrative Costs incurred by Commission (recovered from industry	~$600,000	Minimal	~($600,000)
Compliance costs for industry	High	Minimal	Substantial decrease

Item	Factual	Counterfactual	Change
Legal costs from litigation	High	Minimal	Substantial decrease
Investment incentives for uneconomic areas	Low	Low	Neutral

Direct Financial Impacts on Industry

74 The removal of an annual transfer, estimated to be in the region of ~$23 million, to Telecom from other industry participants is inherent to the proposed change which in effect changes the basis upon which a cross-industry subsidy should be awarded.

Compliance Costs

75 The results of the analysis indicated that the counterfactual would likely result in significant positive gains to the industry as a whole due to a reduction in deadweight costs inherent in the high compliance and legal costs associated with the complex and highly litigated TSO Cost Determination process retained in the factual.

Investment Incentives

76 Officials consider it unlikely that the incentives for investment in uneconomic areas would be significantly different under either the factual or the counter-factual scenarios. Insofar as Telecom is constrained in raising prices to reflect higher costs of servicing these areas, it has minimal incentive to invest in infrastructure beyond the bare minimum required to meet the Local Service TSO requirements. Consequently, the facilitation of greater investment in telecommunications infrastructure for uneconomic areas is addressed in other aspects of Government policy (such as the Rural Broadband Initiative, and the Ultra-Fast Broadband Initiative).

Overall Economic Impacts

77 Officials consider that the proposed changes would have a positive overall economic impact as they remove substantial deadweight losses associated with the current TSO framework. We also acknowledge that the changes may alter the distribution of some future economic rents in the telecommunications sector and may consequently have some impact on property and share values.

Funding and Allocating Subsidies within the Telecommunications Sector

78 The second policy problem that officials sought to address was to identify and analyse options for raising and allocating funding for these subsidies going forward. The objectives of this policy development were to:

a ensure appropriate funding was available for the areas of the sector that required subsidisation;

b ensure appropriate funding was available for the Government's Rural Broadband Initiative;

c minimise the burden on the industry of these activities; and

d ensure that funding was raised in a fair, transparent and efficient manner.

79 Officials considered three primary options for raising the funding required:

a government appropriations (i.e. general taxation) (**option 1**);

b a demand-side levy (i.e. a lined-item on consumer bills for telecommunications services) (**option 2**); and

c an industry levy, administered in a manner similar to the current TSO levies (**option 3**).

80 The relative merits of these options are set out in the following table:

Option	**Pro's**	**Con's**
Government Appropriation	-Broad taxation base minimises distortionary effects.	-Does not specifically target the levy at those who directly benefit from the funded activities (e.g. telecommunications services users and providers).
Demand-side Levy	-Potentially less distortionary than a supply side levy.	-If done on a per connection basis, would distort market against providers with high-connection, low revenue customer bases (e.g. prepay mobile). -If done on a % of revenue basis, the targeting of a specific amount to be raised would be impractical. -would require establishment of new billing and collection mechanisms.
Supply-side Levy	-Established process for allocation and collection of a supply-side levy exists and is broadly accepted. -Targets the levy at the direct beneficiaries of the funded activities. -Potentially allows service providers some discretion in the manner under which they recover the subsidy from their customer base. Theoretically this could enhance the efficiency of the process.	-Potentially distortionary if allocations between industry participants are incorrect. -Comparatively narrow taxation base.

81 On the basis of the above analysis officials concluded that a supply-side levy should be the preferred option for funding subsidies within the telecommunications sector. The primary reasons for this decision were:

a that it leveraged an established and generally accepted allocation and collection process (the TSO charge allocation regime in the Telecommunications Act 2001); and

b that it appropriately provided for the allocation of the levy across the most direct beneficiaries of the funded activities.

Financial Impacts of the Telecommunications Development Levy

82 The anticipated annual financial impact of the TDL on industry participants is summarised in the following table. These estimates are based on officials estimates of required TDL amounts, which indicate that the TDL should be set at $50m per annum through 2015/16, reducing to $10m per annum thereafter.

Item	TDL Annual Liability
Expected TDL paid by Telecom	~$35.5 million
Expected TDL paid by Others	~$16.5 million

CONSULTATION

83 The proposals in this paper were released by the Government for public consultation on 29 September 2009 in the proposal for comment entitled "TSO Reform and Funding Telecommunications Development". 23 submissions were received on the Proposal from a range of interested parties, the majority of which voiced support for the recommendations of this paper. An analysis of the key points raised in submissions is attached as Annex 1 to this RIS.

CONCLUSIONS AND RECOMMENDATIONS

84 In line with the analysis contained in this RIS, the following final policy recommendations were proffered in the corresponding Cabinet paper entitled "Reform of the Telecommunications Service Obligation Framework and Industry Levy Arrangements".

TSO Charge Determination Methodology

85 The recommendations presented below correspond to option 3 identified in the preceding sections of this regulatory impact statement for addressing concerns regarding the existing TSO framework.

86 It is proposed that the Telecommunications Act 2001 be amended to:

a clarify that calculation of the net cost of Local Service TSO provision should be based on aggregating the national costs and benefits to Telecom of providing the local service;

b specify that a Local Service TSO charge is only payable where the national aggregation of costs and benefits shows a net loss to Telecom;

c require a TSO charge determination only when requested by the provider of a TSO instrument;

d in the event that a zero TSO charge is determined for the a TSO instrument, require that the provider of the TSO instrument be liable for the Commission's determination-related costs; and

e in the event that a positive Local Service TSO charge is determined, require the provider to disclose the location of commercially non-viable customer clusters and publicly account for expenditure of any subsidy received.

87 This approach would incorporate the full costs and benefits of the Local Service TSO to Telecom by factoring in a wider offsetting of profitable customers. The result of applying this methodology is that Telecom would only be considered to have incurred a loss if it was able to demonstrate it was not earning a reasonable return across its entire Local Service TSO business. Based on available evidence, Telecom's Local Service TSO net cost is expected to be zero for the foreseeable future.

88 By requiring a TSO charge to be determined only upon the request of the TSO provider (who would only be incentivised to make this request where it believed a positive TSO charge would result), this approach would also avoid unnecessary and costly determinations.

89 Finally, this approach would ensure that, in the event Telecom receives Local Service TSO funding from other industry participants, Telecom expends this funding in a transparent and accountable manner.

Rural Telecommunications Development

90 The recommendations presented below correspond to option 3 identified in the preceding sections of this regulatory impact statement for addressing concerns regarding the levy arrangements supporting subsidisation across the telecommunications sector.

91 A Telecommunications Development Levy on the industry is proposed. The new levy would contribute funding for subsidising rural and other community telecommunications facilities. Revenue collected by applying the Levy would be disbursed for the purposes of:

a paying TSO charges (for example the charge associated with the provision of the Deaf Relay TSO);

b making grants to improve the emergency service call service system; and

c making grants for the deployment of rural telecommunications infrastructure through the Rural Broadband Initiative.

92 Indicatively, it is proposed that the amount of the new levy would be set at $50 million per annum on average for six years commencing 2010/11. After this period the levy would then be set at up to $10 million per annum, with indexing for inflation. In this way levy funding can contribute to the Rural Broadband Initiative through its six year implementation. In later years the reduced levy would be used

to pay for TSO charges and for grant funding of upgrades of the emergency call system.

93 Under this proposal a fund to hold levy revenue would be established as a Crown account and administered by the Ministry of Economic Development. The Levy amount applied each year would be set by the Minister for Communications and Information Technology in consultation with the Minister of Finance. The overriding principle for quantifying the TDL would be that the total levy amount collected would be no greater than the approximately $70 million per annum which is recovered by all TSO levies currently.

94 The new industry levy would be recovered by service providers on the same basis as TSO levies are currently recovered (that is, based on relative revenues), but using amended definitions of the terms "liable person" and "TSO-qualified liable revenue" to further ensure technology independence. In effect the new industry levy would subsume the existing TSO levies and consolidate levy funding for telecommunications subsidisation into a single levy.

95 The implementation of these policy recommendations will require some legislative amendments. In particular:

a the Telecommunications Act 2001 would be amended to provide for the imposition of a levy (the TDL), to be collected from liable persons in accordance with the current cost allocation determination process, and to be used for the purposes of funding TSO charges, emergency call system upgrades and rural telecommunications infrastructure development.

b the “liable person” and “liable person’s TSO qualified revenue” definitions in the Act would be amended to keep pace with technological developments, specifically the transition to IP interconnection[5].

Ancillary Amendments

96 In addition to the TSO reforms and the establishment of a Telecommunications Development Levy, it is recommended that Cabinet approve the concurrent development of amendments to:

a provide for transitional arrangements regarding the Commission's performance of its TSO-related duties; and

b address a minor typographic error (incorrect list numbering), introduced in the Telecommunications Amendment Act 2006 (No. 2).

Transitional Provisions

97 The compensation paid to Telecom under the current TSO framework is retrospective; each year, the Commission initiates a cost determination for the prior year’s delivery of the TSO service.

[5] In general terms, IP Interconnection is an inter-network connectivity service which carries internet protocol packet-based traffic between next generation networks.

98 It is currently expected that any amendments to the TSO regime would not be enacted prior to the initiation of the cost determination for the 2009/10 TSO year. It is hoped however that any amendments will be enacted prior to the initiation of the 2010/11 determination and that the intention to introduce these amendments will be announced by the Government prior to any expenditures by Telecom on the TSO for the 2010/11 year.

99 As such it is recommended that transitional amendments should allow for the completion, under the legislation that prevailed at that time, of any TSO determination up to and including the 2009/2010 determination. Any subsequent TSO determination should be conducted under the amended framework.

IMPLEMENTATION

100 The policies proposed, in this RIS and the corresponding Cabinet paper entitled "Reform of the Telecommunications Service Obligation Framework and Industry Levy Arrangements", are legislative in nature and will be implemented through amendments to the Telecommunications Act 2001.

101 The key risks to implementation are identified in the following table:

Risk	Impact	Mitigation
1) Legislation is not approved by Parliament	-Policies not enacted – status quo prevails. -Expected funding stream for RBI not implemented resulting in a fiscal liability.	-Ensure Minister is fully briefed for caucus and coalition policy discussions.
2) Legislation is delayed	-Policy implementation delayed – Commission may initiate additional determinations under old TSO framework. -Expected funding stream for RBI not implemented resulting in a fiscal liability.	-Ensure appropriate prioritisation on legislative programme. -Discuss contingencies with Minister regarding parliamentary and select committee processes. -Include appropriate transitional provisions within legislation.
3) Loopholes in legislative drafting	-Unintended consequences arise from legislative amendments.	-Careful analysis and review of policies and related legislative amendments. -Peer review and internal consultation through drafting process. -External consultation with Commission and industry on complex matters such as amendments to definitions.

102 The specific transitional arrangements being considered for the legislation are covered in the ‘Conclusions and Recommendations’ section. Treasury is considering options to mitigate the risk of temporal misalignment between the Government’s intended expenditures and the levy funding expected under this legislation.

MONITORING, EVALUATION AND REVIEW

103 The proposed amendments fit within an existing legislative framework. With respect to the TSO, the Commission has the primary responsibility for monitoring and enforcing the policies proposed in this paper. Regarding the Telecommunications Development Levy, it is proposed that the Ministry of Economic Development will administer and monitor the associated Crown fund following established governance practices.

ANNEX 1: KEY ISSUES RAISED IN TSO REFORM CONSULTATION

Local Telephone Service Objectives

Proposal

104 The Local Service TSO ensures that "residential local telephone service"[6]:

- is available to rural communities throughout New Zealand;
- is available in rural areas at a price and quality comparable to local service available in urban areas;
- offers households the option of toll free local calling;
- limits price rises to no more than the rate of inflation; and
- enables households to make emergency 111 calls.

105 The Proposal noted that these objectives remain relevant to ensure ordinary local telephone service is available nationwide, recognising the continued lack of consumer choice in rural areas.

Submissions

106 Almost all commenting submitters stated that all Local Telephone service objectives should be retained.

107 TelstraClear, Woosh, Telecom and the Telecommunications Carriers Forum (**TCF**) argued that the Local Service TSO requirements should be technology neutral.

108 InternetNZ considered that the permitted Local Service price increase should be based on the Producer Price Index (PPI) rather than CPI, and that the TSO should be expanded to include basic broadband. Local Government New Zealand (**LGNZ**) submitted that the price cap should be reviewed after a defined time period.

109 The Auckland Regional Council submitted that urban and rural prices for Local Service should be disaggregated. Venture Southland stated that the Local Service should have price reductions not price increases. 2degrees submitted that the price cap and free local calling requirement should be removed. TUANZ submitted that free local calling should be phased out.

110 Federated Farmers argued for the introduction of greater performance measures.

111 Telecom submitted that the following changes need to be considered to the current Local Service TSO requirements:

- technology neutrality;
- removal of the 111 obligation;
- review of directory obligations; and
- changes to the current price cap.

[6] A defined service in the TSO Deed.

112 Telecom notes that the Government must negotiate with Telecom on any changes to the Local Service TSO Deed.

113 The Business Round Table submitted that there was not a clear case for a universal service obligation, that the free local calling obligation should be scrapped, and that the Government should consider abolishing the Kiwi Share. Business NZ considers that MED should have taken a first principles approach and asked if the TSO was still required. The effectiveness of the Kiwi Share and Local Service TSO should be reviewed.

Assessment

114 The majority of submitters stated the Local Telephone service objectives should be retained. Officials consider that these objectives meet important needs of, and are highly valued by, the community and should be retained.

115 A few submitters suggested possible changes to the objectives including:

- removal of the 111 obligation from Telecom;
- review of the directory obligations;
- changes to the price cap or pricing structure;
- removal of free local calling;
- the inclusion of basic broadband in the TSO;
- the introduction of greater performance measures; and
- technology neutrality.

Emergency services

116 It is not considered to be in the long-term benefit of end-users to remove the 111 or directory obligations. There is a lack of competition in these areas and they form a vital component of the ordinary telephone service. There may be a case to be made for modification of the governance arrangements for these obligations and officials are addressing this issue in separate workstreams.

Directory services

117 Directory services are highly valued by the community and should continue to be a TSO obligation.

Changes to the price cap or pricing structure

118 It would also not be in the long-term interests of end-users to change the current price cap arrangements. Although artificially low prices in rural areas may act as an impediment to competitive entry, they also provide an important protection for consumers in those areas; some of these users may not otherwise have access to affordable basic telecommunications services, such as voice.

Free local calling

119 Free local calling continues to be highly valued by the community and should continue to be a TSO obligation.

Broadband TSO

120 InternetNZ submitted it was disappointed that the Proposal did not consider adding basic broadband to the TSO. The Government is putting in place a comprehensive programme for the development of telecommunications infrastructure in rural areas. A benefit of this programme will be upgrading broadband for most rural consumers.

Greater performance measures

121 The current performance measures are generally adequate for determining whether Telecom is meeting its TSO commitments. Changes to the performance measures (and the obligations to which they relate) would require renegotiation of the TSO Deed.

Technology neutrality

122 Several parties, including the Telecommunications Carriers Forum, argued that the Local Service TSO requirements should be technology neutral.

123 The Local Service TSO Deed already permits Telecom to use any technology as long as that technology is capable of delivering services to the service specifications set out in the TSO Deed.[7] However, the focus on PSTN service standards in the TSO deed effectively limits the technology Telecom can use; to permit full technology neutrality in practice is likely to require a renegotiation of the service specifications. Telecom have already indicated that renegotiation of these aspects of the deed is required to accommodate their PSTN migration.

124 End-users are most concerned with the quality, range and price of the services available to them, and are largely agnostic as to how the service provider delivers those services. There is clearly no benefit to end-users in effectively tying Telecom's TSO obligations to a legacy technology platform and not giving Telecom the flexibility to use the most cost-effective platform for delivery.

<u>*Conclusion*</u>

125 All the Local Telephone service objectives be retained.

126 The Local Service TSO Deed already permits Telecom to use any technology as long as that technology is capable of delivering services to the service specifications set out in the TSO Deed. Officials are conducting further analysis as to whether changes to the service specifications could facilitate the use of other technologies without harming the objectives of the TSO Deed.

[7] Clause 8 of the Local Service TSO Deed states that: "Telecom may use any method or any technology in providing the services it is obliged to provide in this Deed, provided that doing so does not pace Telecom in breach of this Deed."

TSO Charge Methodology

Proposal

127 The Proposal stated that the Government has two main concerns with the current TSO charge methodology:

- the methodology attributes the cost incurred by Telecom but does not count all the benefits gained; and
- there is a lack of transparency and accounting for where losses are incurred and where TSO compensation is spent.

Full range of TSO benefits

128 Overall, the Proposal noted, the current methodology to derive TSO charges for local service is considered to provide Telecom with greater compensation than an efficient provider in a competitive market could reasonably expect to earn.

Transparency and accounting

129 The Proposal proposed that Telecom would publicly disclose the location of commercially non-viable customer (**CNVC**) clusters, together with the revenue and expenditure attributable to these clusters, when a TSO charge (loss) assessment is requested by Telecom.

New TSO charge methodology

130 The Proposal identified two options for a new methodology to set TSO charges compensating Telecom for supplying Local Service:

- Option 1: The Commission derives TSO charges based on aggregating viable and non-viable customer clusters for reconciliation (offsetting against each other) at a national level; and

- Option 2: The Commission derives TSO charges based on aggregating viable and non-viable customer clusters for reconciliation (offsetting against each other) at a sub-national level (for example, local calling area).

131 A new methodology for quantifying TSO charges based on the first option was proposed. The proposed new approach incorporates the full costs and benefits of the TSO to Telecom by factoring in a wider offsetting of profitable customers against unprofitable customers. Therefore, Telecom would only be considered to have incurred a loss if it were able to demonstrate that it was not earning a reasonable return across its entire TSO business.

Submissions

Over-compensation

132 All commenting submitters, with the exception of Telecom and the New Zealand Business Round Table, consider that the current TSO Charging Methodology over-compensates Telecom. The Business Round Table argue that, while there is no economic case for forcing Telecom to cross-subsidise unprofitable rural

customers, as long as the TSO obligations remain, Telecom should be compensated for providing them.

133 Telecom submitted that the proposed TSO Charging Methodology is premised on the incorrect conclusion that Telecom no longer incurs a net cost in providing TSO services. There is a clear net cost to Telecom if two incorrect assumptions underlying the proposed Methodology are corrected:

- the benefit of increased line rental by the Consumer Price Index (CPI) is explicitly included in Commission modelling; and
- the Commission's calculation is net cost to an efficient provider.

134 The Commission's modelling includes: capital costs of deployed infrastructure, ongoing operational/maintenance costs, and future capital investments. Telecom estimates that it spends $25 million per annum on maintenance of infrastructure for commercially non-viable customers, and $35 million in capex in 2008/09 for customers in zone 4.

Transparency and accounting

135 Almost all commenting submitters consider that Telecom should be required to disclose the location of CNVC clusters.

136 Most also thought that Telecom should have to account for expenditure of the subsidy. InternetNZ thought there should be greater transparency, but maybe only when Telecom has requested a cost Determination.

Charging Methodology

137 Most commenting submitters agree with the proposal (option 1) to reform the TSO Charging Methodology.

138 Telecom argues that the funding mechanism is an integral part of the TSO, pointing to:

- an exchange of letters between Telecom and the Government in December 2000;
- Telecom only entering into the Local Service TSO Deed because it knew it would be compensated through the Act; and
- removing funding fundamentally interfering with property rights.

Related issues

139 Rural Women consider the Proposal does not address the underlying problems with the TSO, and removing funding for voice services will only exacerbate these problems. Federated Farmers also notes its concern, stating that Telecom is unlikely to spend more on rural voice services when it receives less funding. It strongly recommends that priority be given to providing funding for and access to basic voice services.

Assessment

Over-compensation

140 Telecom provided some unsupported financial information about its expenditure on CVNC customers. It strongly argues that the Commission's modelling explicitly determines the net cost for an efficient operator of meeting the TSO obligations.

141 There is no doubt that Telecom spends money maintaining infrastructure serving CVNC clusters and in rural areas more broadly. Without supporting information, however, it is not possible to accurately assess Telecom's stated amounts.

142 Telecom is also correct to state that the Commission's TSO modelling calculates the net cost to an efficient provider of serving customer identified as unviable. The Proposal, however, does not question whether Telecom makes individual losses on some customers and customer areas, but whether those loses should be offset against profitable customers within "clusters", within sub-regional areas, or nationally.

Exchange of letters

143 The Crown and Telecom exchanged letters in December 2000 indicating, on the part of the Crown, its intention to upgrade the Kiwi Share and proposing that the Crown and Telecom jointly investigate how this upgrade will be implemented. The upgrade was implemented a year later in the form of the Local Service TSO Deed of December 2001.

144 In its letter of 20 December 2000, the Crown states that:

> "Outside of the Kiwi Share itself we intend to establish a transparent funding mechanism for sharing of any KSO loses by other telecommunications companies. The methodology for calculating KSO loses will be similar to that used in the current Telecommunications (Information Disclosure) Regulation of 1999, but will be set in accord with appropriate principles.
>
> The level of each industry member's contribution will be determined by the Telecommunications Commissioner in accordance with an appropriate methodology, based on a share of relevant telecommunications revenue streams including mobile, long distance, data and local access. Approved shares will be recoverable by Telecom as a debt due from other companies. We would expect the relevant proportions to be recalibrated at least annually to reflect changes in shares of the relevant revenue streams."

145 Telecom is correct that the intention was for KSO loses to be met by the establishment of a transparent funding mechanism. That intention manifested itself in the TSO Determination process in the Telecommunications Act 2001 and would continue to be met under the new Charge Methodology.

146 However, Telecom is incorrect to imply that either the exchange of letters or the TSO Deed suggests that funding will inevitably be provided. The intention was clearly to establish a mechanism to ensure loses could be funded if, and when, they eventuated. That mechanism was subject to implementation by the Commission.

147 Almost all commenting submitters have indicated that the Commission has implemented that process in a way that has over-compensated Telecom. This was clearly not the intention of the legislation and it is appropriate for the Government to move to correct it.

Property rights

148 Telecom also argues that removing funding fundamentally interferes with property rights. This would potentially be the case if the Crown were removing specific funding that had been guaranteed to Telecom – for example, set out in the terms of TSO Deed. Instead, as discussed above, the agreement was for a mechanism to be established to ensure funding would be available to meet losses if and when they eventuated, and a process established to determine whether a net loss had been sustained.

149 The new Charge Methodology does not remove funding but instead clarifies the process for establishing whether funding should be provided. As noted above, the process was implemented in a manner which incorrectly over-compensated Telecom. This could not have been the intention of either party, and it is appropriate for the Government to correct it.

Transparency and accounting

150 Telecom should be required to publicly disclose the location of CNVC clusters, together with the revenue and expenditure attributable to these clusters, when a TSO charge (loss) assessment is requested by Telecom.

151 Requiring Telecom to disclose the location of CNVC clusters should improve competitive outcomes in non-viable areas. Telecom should also be required to track expenditure of the subsidy, if any, in CNVC clusters. Requiring transparent expenditure of industry subsidies will improve industry confidence in the process, improving administrative efficiency and making it less vulnerable to legal challenge.

152 Telecom should, however, only be required to make these public disclosures when it requests a TSO charge determination.

Charging Methodology

153 There was little substantive comment in the submissions on the TSO Charging Methodology preferred by submitters.

154 Officials consider that aggregating viable and non-viable customer clusters at a national level (the Government's Option 1) is the preferable option. The alternative option of aggregating cluster in sub-national groupings would involve greater administrative burden for no clear benefit.

155 For the purposes of administrative efficiency and good regulatory practice, officials further consider that the Act should be amended to apply the same definition of "liable person" to both the TSO framework and the Telecommunications Development Levy (**TDL**), discussed later in this report.

Commercially non-viable customers

156 Telecom has indicated that it would need to spend $130 to $200 million capex over the next 10 years (mostly in the last 5 years of that period) to maintain current TSO services to commercially non-viable customers (**CNVC**). This expenditure would include:

- infrastructure upgrades to meet the needs to people waiting for plain telephone service;
- maintenance of existing plant, poles, etc;
- rehabilitation and renewal of copper plant; and
- lifecycle replacement of equipment such as customer multi access radio and wireless country sets.

157 Without a specific source of funding for these capital expenditure requirements, it is highly likely that this equipment would only be upgraded or replaced to the minimal amount necessary for Telecom to meet its TSO requirements. The level of aggregation at which performance is measured means that services to some CNVCs could deteriorate significantly over time, without Telecom breaching its TSO obligations.

158 Many of the users in these CNVC areas are also unlikely to benefit from the upgrades associated with the proposed Rural Broadband Initiative. Therefore, the rural development programme could include measures to assist these users.

Related issues

159 The TSO Deed requires Telecom to maintain voice services in rural areas. The performance requirements for these services are set out in the TSO Deed and monitored by the Commission. The Crown can enforce non-performance by the TSO provider by application to the High Court to require specific performance. It is unlikely that Telecom would deliberately fail to comply with the TSO Deed if the new Charge Methodology were imposed.

160 However, as compliance with the performance requirements is determined using a national average, Telecom could allow TSO services to decline in some areas (through non-maintenance of aging equipment, such as Digital Multi-Access Radio (DMAR) and country sets), and still meet the TSO service requirements on a national average basis.

161 This is equally true under the present methodology, although Telecom is arguably more incentivised to reduce maintenance, within its legal obligations, under the new Charge Methodology.

Conclusion

162 The TSO Charging Methodology should be amended to aggregate viable and non-viable customer clusters at a national level. The applying definition of "liable person" should also be amended to ensure it is consistent with the definition used for the TDL. The "liable person" definition is discussed later in the context of the TDL.

163 Telecom should be required to disclose the location of CNVC clusters and to publicly account for expenditure of any subsidy it receives.

The New TSO Determination Process

Proposal

164 Under Part 3 of the Act, the Commerce Commission is required to calculate a TSO charge through a determination process. Both industry and the Commission incur significant costs in undertaking the process which the Commission estimates costs about $600,000 per annum.

165 The discussion document proposed a dynamic process whereby a TSO charge is only made at the request of Telecom, who should only have an incentive to request such a calculation when it considers it has an arguable case.

Submissions

166 All commenting submitters, except Telecom and the New Zealand Business Round Table, consider that the proposed new TSO Determination process is feasible. A couple of submitters go on to note that it is, however, unfair to require Telecom to meet TSO objectives without funding. 2degrees submitted that the new process was feasible but should be reviewed annually for the first three years and bi-annually after that.

167 Telecom submitted that the new process is unsustainable because:

- Telecom incurs real costs to meet the TSO;
- it is inconsistent with the Government's own regulatory policy (August 2009 statement), the regulatory reform programme work and the code of good regulatory practice; and
- it is inconsistent with international best practice.

Assessment

168 Officials do not agree with Telecom's view that the new Determination process is inconsistent with the Government's own regulatory policy or its regulatory reform programme work.

169 The new TSO Determination process imposes less cost on the industry and the Commission than the current TSO, which has significant compliance costs. Officials also consider that the new process does not change private property rights – Telecom continues to control how it will deliver TSO local service.

170 Further, it does not remove the ability of Telecom to seek compensation for providing TSO services; instead it proposes amending the basis upon which the Commerce Commission assesses the compensation due to Telecom.

171 In addition, by redirecting industry levy funding into the Rural Broadband Initiative, which will allocate funding on a contestable basis, it promotes innovation and investment in telecommunications services for rural communities.

172 Officials also do not agree with Telecom's view that the new TSO Determination process is inconsistent with international best practice for the provision of universal service. As part of the review of the current TSO obligations, officials assessed the practice in comparator jurisdictions.

173 The arrangements for the provision of universal service are driven by government objectives that are specific to each jurisdiction, while funding methods vary considerably. The lack of any specific international best practice model for the delivery of universal service is emphasised by the carve out for USO in the World Trade Organisation commitments, which set out best practice characteristics of Universal Service Obligations (USO) rather than specific models.[8]

Conclusion

174 The new TSO Determination process will substantially reduce administrative costs while preserving Telecom's ability to seek compensation when appropriate. As discussed above, officials consider that it is consistent with the Government's regulatory policy.

The TDL

Proposal

175 The Government has proposed a Telecommunications Development Levy (**TDL**) to subsidise developments in rural telecommunications and other community telecommunications facilities. Revenue collected by applying the Levy would be disbursed for the purposes of:

- paying TSO charges;
- making grants to improve the emergency call system; and
- making grants for the deployment of rural telecommunications infrastructure.

176 The proposal was to set the TDL at $50 million per annum on average for six years commencing 2010/11. After this period, the TDL would be set at up to $10 million per annum, with indexing for inflation. In addition, the Government would provide a direct contribution of $48 million and, if required, a "loan" from the UFB funding which would be repaid when the TDL funding became available.

[8] Telecommunications Reference Paper: Negotiating group on basic telecommunications, paragraph 3 (Universal Service) - "Any Member has the right to define the kind of universal service obligation it wishes to maintain. Such obligations will not be regarded as anti-competitive per se, provided they are administered in a transparent, non-discriminatory and competitively neutral manner and are not more burdensome than necessary for the kind of universal service defined by the Member."

177 The TDL amount applied each year would be set by the Minister for Communications and Information Technology in consultation with the Minister of Finance. The new levy would apply on an annual basis for the period from 1 July to 30 June, consistent with how TSO levies are applied currently.

Submissions

178 Most commenting submitters consider that the TDL is feasible. Vodafone considers that the process for applying the TDL is feasible, but the amount should be set for the full 6 years, payable quarterly 3 months ahead.

179 Teamtalk notes that the TDL should only fund construction of "open access" infrastructure.

180 Hawke's Bay Councils submitted that the UFB and RBI programmes should be amalgamated. Auckland City Council are concerned that the TDL will be attractive to Telecom.

181 Telecom submitted that the TDL should be extended to fund rural voice infrastructure projects that are agreed between the Government and Telecom. Telecom estimates that $130 to $200 million of investment are needed over the next 10 years to maintain current voice services.

Assessment

182 Vodafone's suggestion that the TDL amount be fixed for 6 years would clearly provide certainty to the levy payers. However, it would also limit the flexibility of the Government to fund more projects in some years than in others. While providing as much certainty as possible to levy payers is important, the value of this flexibility to the Government should not be underestimated. Also, the TDL already provides levy payers with much greater certainty than the current levy.

183 The TDL is already designed to fund open access infrastructure. This is appropriate for projects funded in part with Government money.

184 It would not be appropriate to amalgamate the UFB and RBI initiatives because of key differences in their respective characteristics, including:

- the UFB is a Crown investment with a return over time, while the RBI is a grant; and
- the RBI is specifically targeted at upgrading rural backhaul links for the benefit of communities and rural schools. The UFB is more broadly focused on the wide-spread roll out of "fibre to the premise" (FTTP) in urban areas.

185 It is, of course, important that the UFB and RBI initiatives are as aligned and consistent as practical on key areas, such as technical standards, accounting methodologies and open access requirements.

Conclusion

186 The TDL proposal is feasible and can be implemented successfully as the vehicle to fund the Government's rural broadband objectives. The possibility of extending the RBI to include limited upgrades to facilities for voice services, as suggested by

Telecom, is not relevant to the scope of the proposals considered by this RIS. Rather this policy issue is considered in detail in the complementary Cabinet paper entitled: “Rural Broadband Initiative: Final Policy Proposal”.

Quantity of the TDL

Proposal

187 The overriding principle for quantifying the TDL would be that the total levy amount would be no greater than the approximately $70 million per annum which is recovered by all TSO levies currently.

Submissions

188 A number of submitters considered that the RBI and TSO services should be funded from general taxation because that was a more suitable way of funding social services. A couple of submitters preferred general taxation because funding could be obtained more quickly.

189 Vodafone submitted that the amount of the TDL should be set for the full 6 years, payable quarterly 3 months ahead. The TDL should be capped at $70 million per annum until 30 June 2015, then phased out between 1 July 2015 and 30 June 2017.

190 The New Zealand Regional Fibre Group (**NZRFG**) suggested extending the TDL (at $50 million per annum) to 7 to 10 years. The NZRFG and the Hawke’s Bay Councils suggested ‘recycling’ funds from the buyback of the Crown’s shares in Crown Fibre Holdings (**CFH)** to the RBI fund.

191 The Tourism Industry Association of New Zealand considers that $50 million per annum will not provide the infrastructure needed in a quick timeframe for rural customers. Federated Farmers submitted that the TDL should be set at $70 million on an ongoing basis.

192 The Telecommunications Carriers Forum (**TCF**) submitted that unused funds should be returned to contributors. The industry would also need more than 3 months notice of the TSO levy assessment.

193 Venture Southland considers that the TDL should be calculated on the “depreciated value” of the non-commercial elements of the network, rather than an arbitrary amount, and should be ongoing.

Assessment

194 An industry levy is a more suitable method than general taxation for funding telecommunications services obligations and rural development. The funding to meet these needs should be sourced from users of telecommunications services as they (rather than taxpayers generally) benefit from them.

195 ‘Recycling’ funds from the buyback of Crown shares in CFH is also an unsuitable method of funding rural development. The Crown’s investment in urban fibre networks is an investment, while the funding provided in rural areas is a grant. It would be contrary to good public policy to use a repayment of an investment as a grant.

196 A couple of submitters have also suggested that the amount proposed is inadequate to meet the needs of rural users, and that the TDL should be either extended, enlarged or both. The MED has estimated that $50 million per annum (inclusive of funds earmarked for payment of TSO charges) for six years, and $10 million per annum thereafter, is the amount required to meet the objectives of the Government's rural programme. Changing the length or size of the TDL would only be necessary if those objectives were changed.

Conclusion

197 The quantity of the TDL that was proposed is adequate to meet the Government's objectives. Changes to the quantity or length of the TDL would only be required if the Government changed those objectives.

198 Further consideration should be given to the notice period that should be provided to liable persons regarding their TDL liability. Officials will consult with the Commission and the industry on this matter during the drafting process.

Funding TSO Charges

Proposal

199 The proposal is to fund all current and future TSOs from the TDL. The Act would be amended to this effect.

Submissions

200 There were no submissions on this point.

Assessment

201 Funding all TSOs from the TDL will reduce transaction costs.

Conclusion

202 The proposal to fund all TSOs from the TDL is a sensible approach.

Methodology for Allocating the TDL

Proposal

203 In future, TSO obligations would be funded from a single industry levy (the **TDL**), rather than separately under the current TSO levy arrangements. The TDL would be allocated to service providers classified as liable persons. There are four methods by which this could be allocated that are discussed in detail below. The Proposal for Comment suggested Option 3 below (the status quo updated to include IP interconnection revenue).

Submissions

204 Vodafone submitted that companies should be encouraged to recover levy costs by a line item on customer invoices. The TCF submitted that the costs of the TDL will be passed onto consumers and that the TDL should be funded, if not from general taxation, from a consumer levy.

205 Telecom recommends that the Government work with the industry to design a transparent and equitable model for sharing the costs of the TDL.

206 A number of parties submitted that the definition of liable persons must be changed for the TDL to capture ISPs and content providers.

207 Venture Southland submitted that the TDL should include revenue from intra-cellular network calls.

Definition of liable person

208 A number of submitters, including the TCF, submitted that the definition of "liable person" should be broadened. They propose a demand side consumer levy, which would catch content providers.

209 TelstraClear submitted that the definition of 'liable person' ought to be changed to make it more technology neutral, recognising PSTN and IP calls; a demand side consumer levy would catch content providers. WorldXchange consider the definition should include ISPs. Vodafone considers that the definition should be changed to include providers such as Sky, ISPs and international providers.

210 NZRFG assumes that the definition of "liable person" for the TDL will be limited to retail providers who connect to a layer 1 or layer 2 service; liable persons should be limited to retail providers. Northpower assumes that only service providers offering layer 3 services will be caught and Vector sought greater clarity over the extended definition of "liable person".

211 InternetNZ considers that updating the status quo to include IP interconnection revenue (Option 3) is a pragmatic compromise.

212 Vector and the NZRFG consider that there should be a de-minimis threshold for TSO-qualified revenue established, as transaction costs can otherwise be most of, or greater than, the levy.

Assessment

213 The four methods for allocating the TDL are:

- Option 1 – connections per carrier
- Option 2 – wholesale (layer 2) revenue per carrier
- Option 3 – the status quo updated to include IP interconnection revenue
- Option 4 – the status quo updated to include IP interconnection and content revenue

Option 1 – connections per carrier

214 Under this option, liable persons for the TDL would be all telecommunications carriers hosting network access connections. The liable revenue would be the proportion of each carrier's retail subscriptions as a subset of total access connections.

Pros

- the calculation of liable revenue would be simplified and carriers could collect it easily by a line item on each customer bill.
- the levy would be transparent to consumers and operators.

Cons

- a per connection levy would be regressive, with all telecommunications users effectively paying the same amount per connection, regardless of the quantum of services they used.
- a per connection line item on bills could confuse customers. Customers are likely to think they are paying a "new" levy which they have not previously paid.
- assessing revenue per connection would create distortions against carriers with large numbers of lower value connections (such as mobile carriers with large prepaid customer bases).

Option 2 – wholesale revenue per carrier

215 Under this option, liable persons for the TDL would be all telecommunications carriers hosting network access connections. The liable revenue would be the quantum of each carrier's revenue from wholesale (layer 2) subscriptions for these connections.

Pros

- there are no obvious benefits with this option.

Cons

- it would require making an assessment of "internal" wholesale transfers within vertically integrated providers. This would make implementation complicated and potentially unworkable.
- there are likely to be significant ongoing transaction costs to calculate the "internal" wholesale transfers.

Option 3 – update the status quo to include IP interconnection revenue

216 Under this option, liable persons for the TDL would be all telecommunications carriers operating a public telecommunications access network and selling telecommunications services to end users. The liable revenue of each carrier would be based on its sales of telecommunications services (connectivity only) which its access network facilities.

Pros

- the industry and the Commission are familiar with this approach and the Commission's processes have placed considerable rigour around it.
- the proposal future-proofs the methodology by updating it to include IP Interconnection.

Cons

- public telecommunications access network would need to be carefully defined.

Option 4 – update the status quo to include IP interconnection and content revenue

217 Under this option, liable persons for the TDL would be all telecommunications carriers operating a public telecommunications access network and selling telecommunications services to end users. The liable revenue of each carrier would be based on its sales of telecommunications services (connectivity and content) which its access network facilities.

Pros

- this option would include content revenue to the extent that that content was sold by the carrier and delivered over a public telecommunications access network.

Cons

- it would be difficult to identify and quantify the revenue from content facilitated by each carrier's network;
- many content provider's are offshore businesses; and
- only content directly sold (or resold) by the carrier would be included. Attempting to include as liable persons content providers selling directly to customers would be impractical.

De-minimis threshold

218 A de-minimis threshold could be established to determine whether a specific company should be a liable person for the purposes of the TDL. Submitters have suggested this would reduce transaction costs for companies who pay only a small amount. However, those transactions costs are largely in establishing the amount of liable revenue or connections (depending on the method chosen) which the company would need to perform in any case in order to establish that they did not meet the de-minimis threshold.

219 That said, a de-minimis threshold should still produce other administrative efficiencies for the Commission and relevant providers. Officials note that the Commission already has the power under section 101 of the Act to make regulations setting a de-minimis threshold if it considered it was in the long-term benefit of end-users to do so.

Conclusion

220 Option 3 would be the most appropriate definition of "liable person". It appropriately updates the definition to include IP interconnection, while retaining a methodology that is widely understood by all parties. This would also require consequential amendment to the definition of "liable person's TSO-qualified revenue".

221 Targeted consultation with the TCF, the Commission, and individually with key stakeholders, will be necessary to refine the definition and ensure it correctly describes the policy decision and is easy and practical and implement.

222 A de minimis threshold is already possible under the Act through the Commission’s ability to recommend regulations under Section 101.